## MISCELLANEOUS NOTES

## 1. ABNORMAL MATING BEHAVIOUR OF TUFTED GRAY LANGUR, SEMNOPITHECUS PRIAM AT KALAKAD-MUNDANTHURAI TIGER RESERVE, TAMIL NADU, INDIA

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The Kalakad-Mundanthurai Tiger Reserve is one of the few protected areas in southern India where five primate species, including Lion-tailed Macaque Macaca silenus, Nilgiri Langur Trachypithecus johni, Tufted Gray Langur Semnopithecus priam, Bonnet Macaque Macaca radiata and Slender Loris Loris tardigradus, occur (Johnsingh 2001). Except the Lion-tailed Macaque, others are found in the Mundanthurai plateau extending to an area of 50 sq . km with an altitude of 180 m (above msl ) and surrounded by two major rivers, the Karaiyar and Servalar. Primate studies in the plateau include research on Nilgiri Langur (Sunderraj and Johnsingh 2001) and on Slender Loris (Gupta 2003).

The Tufted Gray Langur has a discontinuous distribution in the plateau. The present observations were made in the last week of December 2006 at the Mundanthurai plateau. Three Tufted Gray Langurs were observed by the first author near the Mundanthurai Guest House. Tufted Gray Langur was known to occur in the lower Pappanasam dam and Pothigaiadi, which are five and eight km, respectively, away from the Mundanthurai Guest House. The first author followed and observed the behaviour of three male langurs in the office complex at Mundanthurai. They primarily depended on the kitchen wastes discarded from the Guest House rather than forage in the forest interiors. A troop of Bonnet Macaques also depended on the discarded materials from the guest house.

The first author recorded one Tufted Gray Langur going behind a female Bonnet Macaque, when she was in heat. The focal female Bonnet Macaque had a broken tail and the vagina was visible to the Langur. Later, many interactions were recorded and the number of approaches made by the Tufted Gray Langur was recorded. Initially, the Langur maintained considerable distance ( $4-10 \mathrm{~m}$ ) from the focal female Bonnet Macaque. Later, as a response to the vaginal discharge that increased on the next day, the Langur frequently approached the female Bonnet Macaque for copulation. Frequent agonistic interactions were observed between the Tufted GrayLangur and alpha male of the Bonnet Macaque troop. A total of 32 such interactions were noticed in a day at different timings and the Langur always remained and foraged with the Bonnet Macaque troop on the first day. On the morning of the third day, the Tufted Gray Langur was observed pseudo mounting the female Bonnet Macaque. While doing so, the dominant male Bonnet Macaque interrupted; the same behaviour continued on the next day. However, on the next day the female Bonnet Macaque did not give any chance for making pseudo mounts. This mode of interaction between the Tufted Gray Langur and Bonnet Macaque has never been reported earlier; however, an interaction between a male Nilgiri Langur and a female Tufted Gray Langur (Johnsingh et al. 1986) was reported earlier from the plateau. A probable reason for such inter-species mating behaviour may be the absence of female langurs in their troop.

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## 2. FURTHER CHANGES IN THE EASTERN LIMIT OF DISTRIBUTION OF THE HANUMAN LANGUR SEMNOPITHECUS ENTELLUS DUFRESNE

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[^0]The general distribution of Hanuman or Gray or Common Langur Semnopithecus entellus Dufrense, covers
almost the entire India, excluding the deserts and the snow-capped higher Himalaya. Groves (2001) proposed a full


Fig. 1: Eastern-most range of Hanuman or Common Langur
specific treatment for different extant subspecies of the Hanuman Langur. Although it is a very welldocumented species, the eastern limit of its distribution was imperfectly known with different authors suggesting erroneous eastern ranges (Roonwal and Mohnot 1977; Tikader 1983; Corbet and Hill 1992; Das et al. 1995; Qiu and Bleisch 1996). Choudhury (2007) tried to fix it as the Rydak river in northern West Bengal, India, and Sankosh river or Puna Tsang Chu in Bhutan, and Padma and Meghna rivers in Bangladesh (historically Jamuna also).

As indicated in other reports (Wangchuk et al. 2004) and as found during recent visits to Bhutan (Choudhury 2008), the Hanuman Langur also occurs east of the Sankosh river or Puna Tsang Chu up to Pele-la (Fig. 1) in Wangdue Phodrang dzongkhag (= district). Hence, in India and Bangladesh, the eastern limit is marked by large rivers, while in Bhutan a large river in the southern part and a high mountain ridge in the north, act as the zoogeographic barriers.

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# 3. THE COMMON INDIAN MONGOOSE HERPESTES EDWARDSII AS SEED DISPERSER IN SRIHARIKOTA ISLAND, INDIA 

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The Common Indian Mongoose Herpestes edwardsii is a carnivore, but fruits and roots have also been recorded in its diet (Prater 1971; Menon 2003). In this short communication, we provide further evidence of the Common Indian Mongoose as a fruit eater, and more importantly as a seed disperser from a study on frugivory in Sriharikota Island, Nellore district, Andhra Pradesh. On April 16, 2007, we
observed small droppings scattered on the roadside and some more deposited underneath parapets of a cable network. All scats were clumped within a $5 \mathrm{sq} . \mathrm{m}$ area and were approximately 8 m away from the nearest fruiting tree. The droppings were small (c. 2 cm in length), and our tribal (Yanadi) field assistant told us that the scats were those of the mongoose, which was confirmed on finding the footprints


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